

## **2006 INTERNATIONAL MECHANICAL CODE MODIFICATIONS**

### **Chapter 1 ADMINISTRATION**

**Section 101.1 Title.** AMEND this section by ADDING City of Tucson to read:

These regulations shall be known as the Mechanical Code of the City of Tucson, hereinafter referred to as “this code”.

### **Chapter 3 GENERAL REGULATIONS**

**Section 303.7 Pit Locations.** REVISE section by ADDING an exception to read:

**Exception:** Liquefied petroleum gas (LPG) appliances and storage tanks shall not be located in any building where LPG can pocket or pool.

**Section 306.3 Appliances in Attics.** REVISE section by ADDING a third exception to read:

**Exception 3:** LPG gas-fired appliances shall not be installed in an attic.

#### **Section 307 Condensate Disposal**

**307.2.1 Condensate Disposal.** REVISE section by ADDING the following to the end of the paragraph:

Condensate disposal shall be allowed to terminate as follows:

1. Into an approved fixture tailpiece, floor sink, funnel drain, waster air-gap fitting, mop sink, and laundry tray.
2. At or below grade outside the building in an area capable of absorbing the condensate flow without surface drainage.
3. Over roof drains or gutters or downspouts that connect to drainage pipes, provided they terminate at or above grade in an area capable of absorbing the condensate flow without surface drainage.

**Section 307.2.2 Drainpipe and material size.** REVISE section by DELETING the last two sentences and REPLACING them with the following table in its place:

| <b>Equipment Capacity</b>                 | <b>Minimum Condensate Pipe Diameter</b> |
|---|---|
| Up to 10 tons of refrigeration            | 3/4 inch                                |
| Over 10 tons to 20 tons of refrigeration  | 1 inch                                  |
| Over 20 tons to 40 tons of refrigeration  | 1 1/4 inch                              |
| Over 40 tons to 100 tons of refrigeration | 1 1/2 inch                              |
| Over 100 tons of refrigeration            | 2 inch                                  |

When two or more units are tied together, the minimum drain size shall be 1”.

## **Chapter 4**

**Section 403.3 Ventilation rate.** REVISE section by ADDING the following after the exception:

The ventilation rate procedure (section 6.2) of ASHRAE Standard 62.1-2004 may be employed as an alternative to the requirements of Section 403 of the International Mechanical Code provided the following basic requirements are met:

1. The occupant density used for calculations must be at least equal to the default occupant density (Table 6-1).
2. The system ventilation efficiency (section 6.2.5.2) must be used to determine the design outside air intake.
3. In the case of multiple zones being served by a single system, the diversity of the zones must be taken into account (section 6.2.5.3).

## **Chapter 5** **EXHAUST SYSTEMS**

**504.3 Cleanout.** REVISE section by ADDING the following sentence to read:

Listed and labeled clothes drier transition duct between a vertical riser and a dryer shall be considered an acceptable means of cleanout.

**506.3.4 Air Velocity.** REVISE section by DELETING “500 feet per minute” and REPLACING it with “1500 feet per minute” and ADDING a new exception to read:

**Exception:** Net exhaust volumes shall be permitted to be reduced during no-load/low-load conditions as allowed by Section 507.1 Item 3, but velocity may never fall below 500 feet per minute.

## **Chapter 7 COMBUSTION AIR**

**ADD new Section 701.6 to read:**

### **701.6 Combustion Air for Liquefied Petroleum Gas Appliances:**

The bottom of lower combustion air openings shall be located at or below the floor of the room containing the equipment/appliance(s). A combustion air duct, when used, shall be installed with a downward slope of not less than 1/8 inch per foot starting from a point at or below the equipment/appliance room floor and continuing to the outside of the structure, where it shall terminate above the finish grade. No Pockets or trapped sections shall be permitted in any lower combustion air duct.

## **Chapter 10 BOILERS, WATER HEATERS AND PRESSURE VESSELS Section 1001-General**

**Section 1001.1 SCOPE.** REVISE section by DELETING the text of exception 7 in its entirety and REPLACING with the following:

7. Any boiler or lined water heater in excess of 200,000 BTU shall be subject to inspection by federal or state inspections. See Arizona Boiler Rules for regulations, Title 20, Chapter 5.

**ADD new Section 1003.4 to read:**

**Section 1003.4 Certification.** Periodic inspections shall be made by qualified inspectors every three years. An operating certificate shall be issued if in a safe condition.

**Section 1004.1 Standards.** REVISE section by DELETING all text after the second sentence and ADDING the following:

Boilers shall be designed and constructed in accordance with ASME *Boiler and Pressure Vessel Code*, and Arizona Boiler Rules, Title 20, Chapter 5.

## **Chapter 11 REFRIGERATION**

**1104.3.4 PROTECTION FROM REFRIGERANT DECOMPOSITION.** REVISE section by DELETING “R-717” from exception 1.

**1109.1 Testing Required.** REVISE section by DELETING the word “pure” in exception 3 and REPLACING it with “purge”.

## **Chapter 12**

### **HYDRONIC PIPING**

**ADD new Section 1201.3 as follows:**

**1201.3 Water Conservation.** A water-cooled refrigerating system, (defined as refrigerating system using water, all, or in part, for condensing a refrigerant), shall not discharge more than three gallons of condenser waste water per nominal ton per hour into an approved sanitary disposal system. Condenser wastewater discharge shall be accomplished by the use of an air-gap, as described in the Uniform Plumbing Code. Each water-cooled refrigerating system shall be provided with one or more of the following water-saving devices:

- (a) a cooling tower or
- (b) an evaporative condenser or
- (c) an approved water circulating device.

Evaporative cooling systems shall be provided with a recirculating water system. Any bleed off rate used by the system shall be limited to that recommended by the manufacturer. Once-through evaporative cooling systems using potable water shall not be permitted.